

which is enclosed herewith, shows how currently pending Claims 1, 6, 8, 10, 12, 14-45, and 47-60 were amended to produce amended Claims 1, 6, 8, 10, 12, 14-45, and 47-60. In Appendix G, the portions being added are underlined; and the portions being deleted are enclosed in brackets.)

#### REMARKS

This response is being submitted within one month after the shortened one-month term set for responding to the January 29, 2003 Office Action. Therefore, a petition and fee for an extension of time are enclosed herewith.

Hereinafter, the claims that are pending prior to the entry of the amendments in this response are called "currently pending claims." This response amends currently pending Claims 1, 6, 8, 10, 12, 14-45, and 47-60. Upon amendment, the above-identified U.S. application will have five independent claims (amended Claims 1, 6, 8, 10, and 15) and 61 total claims (amended Claim 1, currently pending Claims 2-5, amended Claim 6, currently pending Claim 7, amended Claim 8, currently pending Claim 9, amended Claim 10, currently pending Claim 11, amended Claim 12, currently pending Claim 13, amended Claims 14-45, currently pending Claim 46, amended Claims 47-60, and currently pending Claim 61). The Applicants previously paid for up to six independent claims and 61 total claims. Therefore, no fees are due for excess claims.

This response amends currently pending Claims 1, 6, 8, 10, and 15 to claim Composition 4. Support for claiming Composition 4 can be found in, inter alia, originally filed Claims 1 and 8. The other

claim amendments merely improve the wording of the claims.

While the Applicants traverse the outstanding restriction requirements, the Applicants nevertheless provisionally elect Invention I (a growth stimulating composition) for prosecution on the merits. More specifically, the Applicants provisionally elect Composition 4 for prosecution on the merits.

Composition 4 comprises Components A, B, C, and G. For Component A, the Applicants provisionally elect dibutyryl-cyclic AMP. For Component B, the Applicants provisionally elect caffeine. For Component C, the Applicants provisionally elect forskolin. For Component G, the Applicants provisionally elect a mixture of auxine (e.g., indole 3-acetic acid) and N-ethaneolamine (e.g., monoethaneolamine).

In the outstanding official action, the Examiner indicates that the Applicants must elect a specific species for Component H. Because elected Composition 4 does not include Component H, the Applicants should not be required to elect a specific species for Component H; and, therefore, the Applicants respectfully traverse this requirement. Nevertheless, if the Applicants are required to elect a specific species for Component H, then the Applicants provisionally elect folpet, which is a fungicide.

The elected invention and species are readable upon amended Claim 1, currently pending Claims 2-5, amended Claim 6, currently pending Claim 7, amended Claim 8, currently pending Claim 9, amended Claim 10, currently pending Claim 11, amended Claim 12, currently pending Claim 13, amended Claims 14-45, and currently pending Claims 46 and 61.

If amended Claims 1 and 15 are ultimately found to be allowable, then the Examiner should consider on the merits amended Claims 47-

60 because these subclaims are each directly or indirectly dependent on an allowable elected base claim (amended Claim 1 or 15).

Under 35 U.S.C. § 121, the United States Patent and Trademark Office is authorized, but is not required to restrict an application to one invention if two or more independent and distinct inventions are claimed in one application. In view of the expenses that would be imposed upon the Applicants by multiple patent applications and multiple patents, it is believed that restriction requirements should be issued only when absolutely necessary; and the Applicants respectfully request withdrawal of the outstanding restriction requirements.

The traversal of the restriction requirements and the remarks regarding the traversal are being submitted without prejudice. Neither the traversal of the restriction requirements nor the remarks regarding the traversal shall be interpreted as disputing the Examiner's suggestion that Inventions I and II are patentably distinct or that various species are patentably distinct.

It is submitted that the application is in condition for allowance. Allowance of the application at an early date is solicited.

The Applicants reserve the right to seek protection for any unclaimed subject matter either subsequently in the prosecution of the present case or in a divisional or continuation application.

This response amends currently pending Claims 1, 6, 8, 10, 12, 14-45, and 47-60. The amendments that are described in the preceding sentence were done to more fully claim the invention and/or to improve the wording and were not done to overcome the prior art, were not done to overcome rejections under 35 U.S.C. § 112, and were not done to overcome any other rejections or objections. The amendments that are described in the first sentence of this para-

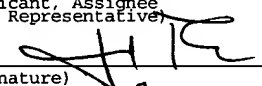
graph shall not be considered necessary to overcome the prior art, shall not be considered necessary to overcome rejections under 35 U.S.C. § 112, and shall not be considered necessary to overcome any other rejections or objections.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to Deposit Account No. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 C.F.R. § 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed; and the petition fee due in connection therewith may be charged to deposit account No. 12-0415.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first-class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C., 20231 on

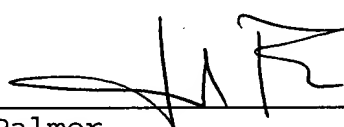
March 28, 2003  
(Date of Deposit)

JOHN PALMER  
(Name of Applicant, Assignee  
or Registered Representative)

  
(Signature)

3-28-03  
(Date)

Respectfully submitted,

  
\_\_\_\_\_  
John Palmer  
Reg. No. 36,885  
LADAS & PARRY  
5670 Wilshire Boulevard  
Suite 2100  
Los Angeles, California 90036  
(323) 934-2300

Enclosures: Appendices F and G



APPENDIX F

RECEIVED  
APR 10 2003  
TECH CENTER 1600/2900

Re: U.S. Patent Application No. 09/829,779

Our Ref.: 618736-3/JP/B-4158

Date: March 28, 2003

Please replace currently pending Claims 1, 6, 8, 10, 12, 14-45, and 47-60 with amended Claims 1, 6, 8, 10, 12, 14-45, and 47-60, as indicated below.

1. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 1, Composition 2, Composition 3, and Composition 4;

wherein the Composition 1 consists essentially of Component A and one or more of Components B, C, D, E, F, G, and H; and wherein the Composition 1 further consists essentially of optionally Component I and optionally Component J;

wherein the Composition 2 consists essentially of the Component C and one or more of the Components A, B, D, E, F, G, and H; and wherein the Composition 2 further consists essentially of optionally the Component I and optionally the Component J;

wherein the Composition 3 consists essentially of the Component A and the Component C; and wherein the Composition 3 optionally further consists essentially of one or more of the Components B, D, E, F, G, H, I, and J;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and the Component G;

wherein the Component A is one or more precursor compounds of cyclic AMP, wherein the precursor compounds are transformed into cyclic AMP inside a cell of the plant;

wherein the Component B is one or more compounds with a

## APPENDIX F

capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C is one or more compounds with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D is one or more agonist compounds of  $\beta$ -adrenergic receptors;

D | wherein the Component E is one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins;

wherein the Component F is one or more mineral fertilizers;

wherein the Component G is one or more phytohormone products;

wherein the Component H is one or more phytosanitary products;

wherein the Component I is one or more tensioactive agents; and

wherein the Component J is one or more moistening agents.

---

6. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 5;

D2 | wherein the Composition 5 comprises at least one of Components A, B, C, D, and E, and wherein the Composition 5 further comprises a mineral fertilizer;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

## APPENDIX F

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

*DB* wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors;

wherein the Component E comprises one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the Component G comprises a phytohormone product.

---

8. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 6;

wherein the Composition 6 comprises at least one of Components A, B, C, D, and E, and wherein the Composition 6 further comprises Component G;

*DB* wherein the Composition 4 comprises the Component A, the Component B, the Component C, and the Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors;

wherein the Component E comprises one or more chosen

## APPENDIX F

D3 compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the Component G comprises a phytohormone product.

---

10. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 7;

wherein the Composition 7 comprises at least one of Components A, B, C, D, and E, and wherein the Composition 7 further comprises a phytosanitary product;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and Component G;

D4 wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors;

wherein the Component E comprises one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the Component G comprises a phytohormone product.

---

D5 12. (amended three times) A growth stimulating composition in accordance with claim 1, wherein the growth stimulating composition includes the Component I.

---

## APPENDIX F

14. (amended three times) A growth stimulating composition in accordance with claim 1, wherein the growth stimulating composition includes the Component J.

15. (amended once) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 8;

wherein the Composition 8 comprises Component A and/or Component C; wherein the Composition 8 further comprises Component D and/or Component E; wherein the Composition 8 further optionally comprises Component B;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors;

wherein the Component E comprises one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the Component G comprises a phyto regulator product.

16. (amended once) A growth stimulating composition as claimed

## APPENDIX F

in Claim 15, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

17. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the Composition 8 comprises the Component A and the Component D.

18. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the Composition 8 comprises the Component A and the Component E.

19. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the Composition 8 comprises the Component C and the Component D.

20. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the Composition 8 comprises the Component C and the Component E.

21. (amended once) A growth stimulating composition as claimed in Claim 18, wherein the Component E comprises one or more of the prostaglandins.

22. (amended once) A growth stimulating composition as claimed in Claim 20, wherein the Component E comprises one or more of the

## APPENDIX F

prostaglandins.

23. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the Composition 8 comprises the Component A and the Component D.

24. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the Composition 8 comprises the Component A and the Component E.

25. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the Composition 8 comprises the Component C and the Component D.

26. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the Composition 8 comprises the Component C and the Component E.

27. (amended once) A growth stimulating composition as claimed in Claim 24, wherein the Component E comprises one or more of the prostaglandins.

28. (amended once) A growth stimulating composition as claimed in Claim 26, wherein the Component E comprises one or more of the prostaglandins.

29. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the Composition 8 further comprises at least one of Component F, the Component G, and Component H;  
wherein the Component F comprises a mineral fertilizer;  
[wherein the Component G comprises a phyto regulator product;]

## APPENDIX F

and

wherein the Component H comprises a phytosanitary product.

30. (amended once) A growth stimulating composition as claimed in Claim 29, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, sugars, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

Db 31. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the Composition 8 further comprises at least one of Component F, the Component G, and Component H;

wherein the Component F comprises a mineral fertilizer;

and

wherein the Component H comprises a phytosanitary product.

32. (amended once) A growth stimulating composition as claimed in Claim 31, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, sugars, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

33. (amended once) A growth stimulating composition as claimed in Claim 29, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-

## APPENDIX F

ethanolamines, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

34. (amended once) A growth stimulating composition as claimed in Claim 31, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

35. (amended once) A growth stimulating composition as claimed in Claim 30, wherein the Component E comprises one or more of the prostaglandins.

36. (amended once) A growth stimulating composition as claimed in Claim 32, wherein the Component E comprises one or more of the prostaglandins.

37. (amended once) A growth stimulating composition as claimed in Claim 33, wherein the Component E comprises one or more of the prostaglandins.

38. (amended once) A growth stimulating composition as claimed in Claim 34, wherein the Component E comprises one or more of the prostaglandins.

39. (amended once) A growth stimulating composition as claimed in Claim 6, wherein the mineral fertilizer is selected from the group consisting of ammonium nitrates, potassium phosphates, urea, and mixtures thereof.

## APPENDIX F

40. (amended once) A growth stimulating composition as claimed in Claim 8, wherein the phyto regulator product is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, and mixtures thereof.

41. (amended once) A growth stimulating composition as claimed in Claim 7, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

42. (amended once) A growth stimulating composition as claimed in Claim 9, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

43. (amended once) A growth stimulating composition as claimed in Claim 11, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

## APPENDIX F

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

44. (amended once) A growth stimulating composition as claimed in Claim 39, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

45. (amended once) A growth stimulating composition as claimed in Claim 40, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

---

47. (amended twice) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 1 to the plant.

48. (amended once) A method as claimed in Claim 47, wherein the Component A is dibutyryl-cyclic AMP;

wherein the Component B is theophylline, theobromine, or caffeine;

wherein the Component C is forskolin; and

wherein the Component D is isoproterenol, epinephrine, or

## APPENDIX F

norepinephrine.

49. (amended once) A method as claimed in Claim 47, wherein the plant is an adult plant, and wherein the growth stimulating composition is applied radicularly or foliarly.

50. (amended once) A method as claimed in Claim 48, wherein the plant is an adult plant, and wherein the growth stimulating composition is applied radicularly or foliarly.

51. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 15 to the plant.

D1 52. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 15 to the adult plant radicularly or foliarly.

53. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 16 to the plant.

54. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 16 to the adult plant radicularly or foliarly.

55. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 29 to the plant.

**APPENDIX F**

56. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 29 to the adult plant radicularly or foliarly.

57. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 30 to the plant.

D1 58. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 30 to the adult plant radicularly or foliarly.

59. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 34 to the plant.

60. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 34 to the adult plant radicularly or foliarly.

---



APPENDIX G

RECEIVED

APR 10 2003

TECH CENTER 1600/2900

Re: U.S. Patent Application No. 09/829,779

Our Ref.: 618736-3/JP/B-4158

Date: March 28, 2003

Please amend currently pending Claims 1, 6, 8, 10, 12, 14-45, and 47-60 as indicated below, wherein the portions being added are underlined and the portions being deleted are enclosed in brackets.

1. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 1, Composition 2, [and] Composition 3, and Composition 4;

wherein the Composition 1 consists essentially of Component A and one or more of Components B, C, D, E, F, G, and H; and wherein the Composition 1 further consists essentially of optionally Component I and optionally Component J;

wherein the Composition 2 consists essentially of the Component C and one or more of the Components A, B, D, E, F, G, and H; and wherein the Composition 2 further consists essentially of optionally the Component I and optionally the Component J;

wherein the Composition 3 consists essentially of the Component A and the Component C; and wherein the Composition 3 optionally further consists essentially of one or more of the Components B, D, E, F, G, H, I, and J;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and the Component G;

wherein the Component A is one or more precursor compounds of cyclic AMP, wherein the precursor compounds are transformed into cyclic AMP inside a cell of the plant;

## APPENDIX G

wherein the Component B is one or more compounds with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C is one or more compounds with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D is one or more agonist compounds of  $\beta$ -adrenergic receptors;

wherein the Component E is one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins;

wherein the Component F is one or more mineral fertilizers;

wherein the Component G is one or more phytohormone products;

wherein the Component H is one or more phytosanitary products;

wherein the Component I is one or more tensioactive agents; and

wherein the Component J is one or more moistening agents.

6. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 5;

wherein the Composition 5 comprises [comprising] at least one of Components A, B, C, D, and E[:], and wherein the Composition 5 further comprises a mineral fertilizer;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into

## APPENDIX G

cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors;

wherein the Component E comprises one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the [composition further comprises a mineral fertilizer] Component G comprises a phyto regulator product.

8. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 6;

wherein the Composition 6 comprises [comprising] at least one of Components A, B, C, D, and E[:], and wherein the Composition 6 further comprises Component G;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and the Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -

## APPENDIX G

adrenergic receptors;

wherein the Component E comprises one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the [composition further] Component G comprises a phyto regulator product.

10. (amended twice) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 7;

wherein the Composition 7 comprises [comprising] at least one of Components A, B, C, D, and E[:], and wherein the Composition 7 further comprises a phytosanitary product;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors;

wherein the Component E comprises one or more chosen compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the [composition further comprises a phytosanitary product] Component G comprises a phyto regulator product.

## APPENDIX G

12. (amended three times) A growth stimulating composition in accordance with claim 1, wherein the growth stimulating composition includes the Component I.

14. (amended three times) A growth stimulating composition in accordance with claim 1, wherein the growth stimulating composition includes the Component J.

15. (amended once) A growth stimulating composition for a plant, wherein the growth stimulating composition is selected from the group consisting of Composition 4 and Composition 8;

wherein the Composition 8 comprises [comprising] Component A and/or Component C; wherein the [composition] Composition 8 further comprises Component D and/or Component E; wherein the [composition] Composition 8 further optionally comprises Component B;

wherein the Composition 4 comprises the Component A, the Component B, the Component C, and Component G;

wherein the Component A comprises a precursor compound of cyclic AMP, wherein the precursor compound is transformed into cyclic AMP inside a cell of the plant;

wherein the Component B comprises a compound with a capacity to inhibit activity of one or more phosphodiesterases;

wherein the Component C comprises a compound with a capacity to stimulate activity of one or more adenylyl-cyclase enzymes;

wherein the Component D comprises an agonist compound of  $\beta$ -adrenergic receptors; [and]

wherein the Component E comprises one or more chosen

## APPENDIX G

compounds selected from the group consisting of arachidonic acid and prostaglandins; and

wherein the Component G comprises a phytohormone product.

16. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

17. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the [composition] Composition 8 comprises the Component A and the Component D.

18. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the [composition] Composition 8 comprises the Component A and the Component E.

19. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the [composition] Composition 8 comprises the Component C and the Component D.

20. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the [composition] Composition 8 comprises the Component C and the Component E.

21. (amended once) A growth stimulating composition as claimed

## **APPENDIX G**

in Claim 18, wherein the Component E comprises one or more of the prostaglandins.

22. (amended once) A growth stimulating composition as claimed in Claim 20, wherein the Component E comprises one or more of the prostaglandins.

23. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the [composition] Composition 8 comprises the Component A and the Component D.

24. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the [composition] Composition 8 comprises the Component A and the Component E.

25. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the [composition] Composition 8 comprises the Component C and the Component D.

26. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the [composition] Composition 8 comprises the Component C and the Component E.

27. (amended once) A growth stimulating composition as claimed in Claim 24, wherein the Component E comprises one or more of the prostaglandins.

28. (amended once) A growth stimulating composition as claimed in Claim 26, wherein the Component E comprises one or more of the prostaglandins.

## APPENDIX G

29. (amended once) A growth stimulating composition as claimed in Claim 15, wherein the [composition] Composition 8 further comprises at least one of [Components F, G, and H] Component F, the Component G, and Component H;

wherein the Component F comprises a mineral fertilizer;  
[wherein the Component G comprises a phyto regulator product;]  
and

wherein the Component H comprises a phytosanitary product.

30. (amended once) A growth stimulating composition as claimed in Claim 29, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, gibberelins, polyamines, n-ethanolamines, sugars, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

31. (amended once) A growth stimulating composition as claimed in Claim 16, wherein the [composition] Composition 8 further comprises at least one of [Components F, G, and H] Component F, the Component G, and Component H;

wherein the Component F comprises a mineral fertilizer;  
[wherein the Component G comprises a phyto regulator product;]  
and

wherein the Component H comprises a phytosanitary product.

32. (amended once) A growth stimulating composition as claimed in Claim 31, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, gibberelins, polyamines, n-

## APPENDIX G

ethanolamines, sugars, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

33. (amended once) A growth stimulating composition as claimed in Claim 29, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

34. (amended once) A growth stimulating composition as claimed in Claim 31, wherein the Component F comprises ammonium nitrate, potassium phosphate, or urea;

wherein the Component G is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, and mixtures thereof; and

wherein the Component H comprises a fungicide or a herbicide.

35. (amended once) A growth stimulating composition as claimed in Claim 30, wherein the Component E comprises one or more of the prostaglandins.

36. (amended once) A growth stimulating composition as claimed in Claim 32, wherein the Component E comprises one or more of the prostaglandins.

37. (amended once) A growth stimulating composition as claimed in Claim 33, wherein the Component E comprises one or more of the prostaglandins.

## APPENDIX G

38. (amended once) A growth stimulating composition as claimed in Claim 34, wherein the Component E comprises one or more of the prostaglandins.

39. (amended once) A growth stimulating composition as claimed in Claim 6, wherein the mineral fertilizer is selected from the group consisting of ammonium nitrates, potassium phosphates, urea, and mixtures thereof.

40. (amended once) A growth stimulating composition as claimed in Claim 8, wherein the phyto regulator product is selected from the group consisting of cytoquinines, auxines, giberelines, polyamines, n-ethanolamines, and mixtures thereof.

41. (amended once) A growth stimulating composition as claimed in Claim 7, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

42. (amended once) A growth stimulating composition as claimed in Claim 9, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

## APPENDIX G

43. (amended once) A growth stimulating composition as claimed in Claim 11, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

44. (amended once) A growth stimulating composition as claimed in Claim 39, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

45. (amended once) A growth stimulating composition as claimed in Claim 40, wherein the Component A comprises dibutyryl-cyclic AMP;

wherein the Component B comprises theophylline, theobromine, or caffeine;

wherein the Component C comprises forskolin; and

wherein the Component D comprises isoproterenol, epinephrine, or norepinephrine.

47. (amended twice) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition

## **APPENDIX G**

claimed in Claim 1 to the plant.

48. (amended once) A method as claimed in Claim 47, wherein the Component A [comprises] is dibutyryl-cyclic AMP;

wherein the Component B [comprises] is theophylline, theobromine, or caffeine;

wherein the Component C [comprises] is forskolin; and

wherein the Component D [comprises] is isoproterenol, epinephrine, or norepinephrine.

49. (amended once) A method as claimed in Claim 47, wherein the plant is an adult plant, and wherein the growth stimulating composition is applied radicularly or foliarly.

50. (amended once) A method as claimed in Claim 48, wherein the plant is an adult plant, and wherein the growth stimulating composition is applied radicularly or foliarly.

51. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 15 to the plant.

52. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 15 to the adult plant radicularly or foliarly.

53. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 16 to the plant.

## **APPENDIX G**

54. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 16 to the adult plant radicularly or foliarly.

55. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 29 to the plant.

56. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 29 to the adult plant radicularly or foliarly.

57. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 30 to the plant.

58. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 30 to the adult plant radicularly or foliarly.

59. (amended once) A method for stimulating growth in a plant, the method comprising applying the growth stimulating composition claimed in Claim 34 to the plant.

60. (amended once) A method for stimulating growth in an adult plant, the method comprising applying the growth stimulating composition claimed in Claim 34 to the adult plant radicularly or foliarly.